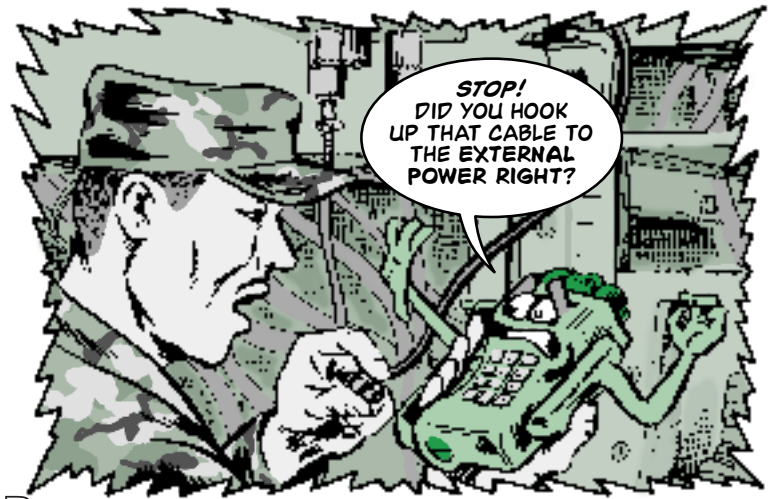
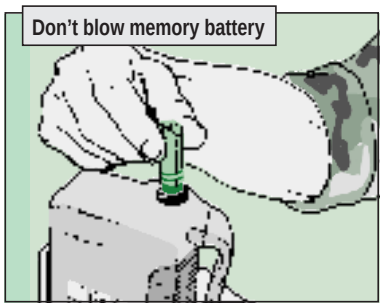
Don't Blow It!

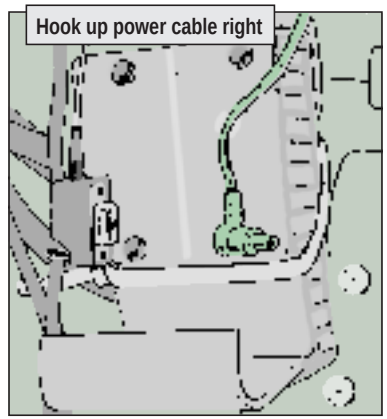


Did you hear about the AN/PSN-11 precision lightweight global positioning receiver that blew up? If you did, you're better off than the vehicle operator! When the PLGR blew, he temporarily lost his hearing. The PLGR was destroyed, of course.

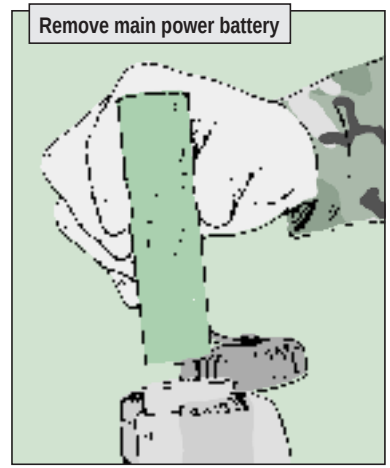
What blew was the PLGR's 3.6-volt memory battery. Why it blew was because the external power source was hooked up wrong.



You can power The PLGR from an external power source using cable, NSN 6150-01-375-8661. But you must hook up the cable right or you could lose more than your hearing.

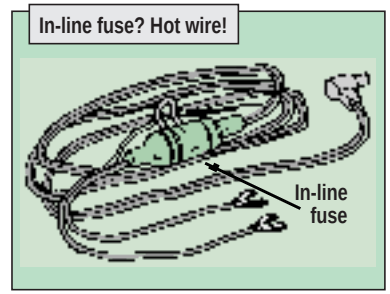


You may remember a Ground Precautionary Message (GPM 97-005) that advised PLGR users to always remove the main power battery when connecting the PLGR to external power to avoid exploding the main power battery due to a reverse charging situation. That advice still holds.



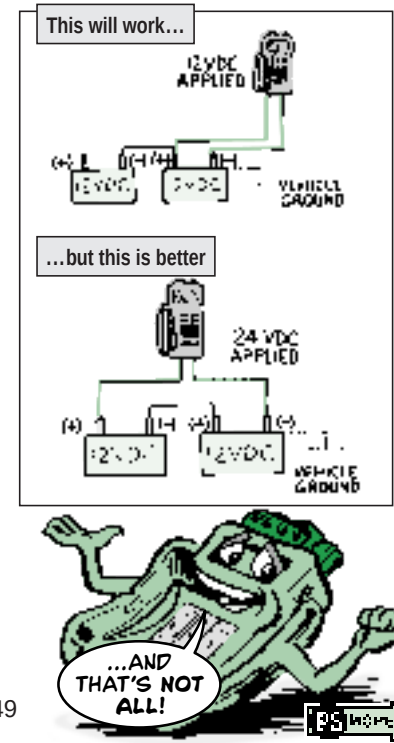
But this time around the discussion is about preventing an electrical charge from finding its way to the memory battery as a result of the wrong power or grounding connections.

Step one in the hookup process is to make sure you don't reverse polarity when attaching the PLGR cable to vehicle power. A good way to make sure is to remember that the cable wire with the in-line fuse is always the positive, or hot wire. It is always connected to a positive terminal!

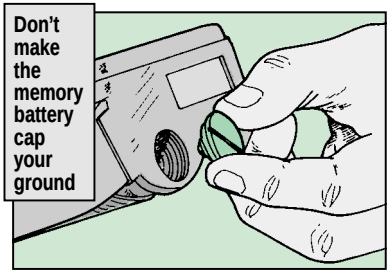


Step two is to make sure the PLGR ground is the same as the vehicle ground. This can be confusing since most vehicles have batteries connected in series.

The PLGR grounding wire should be attached to the same battery post as the ground wire that runs from the vehicle to the vehicle's battery. This avoids the risk of an inadequate ground that might occur due to paint or other insulating affects if you attach the grounding wire directly to the vehicle's body.

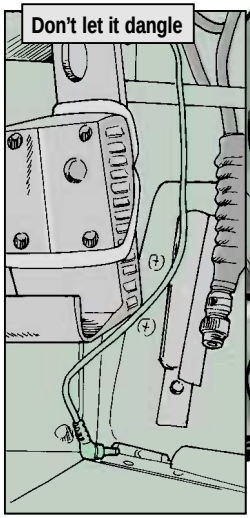


A wrong grounding wire hookup can cause the memory battery to get a charge from the vehicle battery and explode. This happens when the memory battery cap touches a grounded metal object—like any part of the vehicle—while the PLGR is connected to the vehicle's power.



Also, remember that when the external power cable is disconnected from the PLGR, but still connected to the vehicle's power source, the tip of your cable is still "hot" and you could get a shock from touching it!

So when you remove the PLGR from its external power source after your mission is complete, remove the cable, too.



For those times you can't remove the cable, make sure the plug-in is secured and not allowed to swing around and make contact with metal. A solution as simple as a wrap of duct tape around the connector end may prevent metal-to-metal contact that will blow the in-line fuse.